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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,689	09/20/2004	Kazuhito Niwano	257572US2PCT	5672

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

KHAN, IBRAHIM A

ART UNIT	PAPER NUMBER
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2617

NOTIFICATION DATE	DELIVERY MODE
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05/03/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/506,689	Applicant(s) NIWANO, KAZUHITO	
	Examiner Ibrahim A. Khan	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/20/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. **Claims 1, 2, 4 and 5** are rejected under 35 U.S.C. 102(e) as being anticipated by **Dabak et al. (US 6483821)**.

Consider claim 1, Dabak clearly discloses a communication system including a mobile station capable of transmitting a plurality of control channels (*see column 2 lines 25-30, lines 36-38, 47-49 where discloses CDMA mobile communications system having multiple control channels*), wherein at least one of the control channels has pilot data placed separately at a plurality of positions within a transmission unit time channels (*see figures 1a, 1b, column 2 lines 25-30, lines 36-38, 47-49 and lines 53-58, lines 61-65, column 3 table 1, lines 25-27 where Dabak discloses that a pilot is transmitted at a certain rate within a frame*).

Consider **claim 4**, Dabak discloses a communication system including a mobile station capable of transmitting a channel channels (*see column 2 lines 25-30, lines 36-38, 47-49 where discloses CDMA mobile communications system having multiple control channels*) in which pilot data is included and a transmission rate of data other than the pilot data is variable *see, column 2 lines 53-58, lines 61-65, column 3 table1, lines 25-27 where Dabak discloses a channel having a different pilot symbols based on the data transmission rate)* wherein a transmission rate of the pilot data is varied in response to the transmission rate of the data other than the pilot data (*see, figures 1a, 1b and figures 4a and 4b column 2 lines 53-58, lines 61-65, column 3 table1, lines 25-27 column 4 lines 32-44 where Dabak discloses that the number of transmitted pilot symbols are differed based on the variable transmission rates*).

Consider **claim 2** and as applied to claim 1, discloses wherein the plurality of positions are assigned to fields formed by dividing the transmission unit time into a plurality of subdivisions (*see figures 1a, 1b and 4a and 4b, column 2 lines 25-30, lines 36-38, 47-49 and lines 53-58, lines 61-65, column 3 table1, lines 25-27 where Dabak discloses that a pilot is transmitted at a certain rate within a frame wherein the frame is subdivided into slots*)

Consider **claim 5** and as applied to claim 4, Dabak discloses wherein the pilot data is transmitted uninterruptedly by a data field other than a pilot field, when the data field does not transmit any other data (*see figures 1a, 1b and 4a and 4b*)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over **Dabak et al.** (US 6483821) in view of **Attar et al.** (US 7088701)

Consider **claim 3** and as applied to claim 1, Dabak discloses wherein pilots are placed at a plurality of positions within the transmission unit time (*column 2 lines 25-30, lines 36-38, 47-49 and lines 53-58, lines 61-65, column 3 table 1, lines 25-27*) but does not disclose soft handover state. In the related art Attar discloses a soft handover state in which communication is maintained with two base stations before communication is handed over to a target base station (*column 1 lines 53-56 and lines 65-67*)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dabak with a soft handover as described by Attar to prevent a discontinuation in the communication of a mobile subscriber (*column 1 lines 55-59*).

Consider **claim 6** and as applied to claim 4, Dabak discloses that the transmission rate of the pilot data is varied but does not disclose a handover state. In the related art Attar discloses a

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soft handover state in which communication is maintained with two base stations before communication is handed over to a target base station (*column 1 lines 53-56 and Lines 65-67*)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Dabak with a soft handover as described by Attar to prevent a discontinuation in the communication of a mobile subscriber (*column 1 lines 55-59*).

Conclusion

5. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ibrahim A. Khan whose telephone number is (571) 270-1110. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

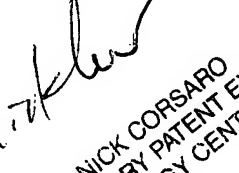
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Ibrahim A. Khan
I.A.K./iak

04/17/2007


NICK CORSARO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600